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BORNSCHEUER et al., Ser. No. 09/161,680

8 and 9 in view of the foregoing amendment and the following remarks. The typographical error in claim 1 has been corrected. Claim 4 is limited to Gram-positive bacteria; and claim 9 has been canceled in favor of new claims 10 and 11 which are limited to a Markush grouping and a species, respectively. Claim 8 has been canceled. Favorable reconsideration is solicited.

The examiner is requested to favorably reconsider the rejection of claims 1, 2 and 4-9 under 35 U.S.C. 112, second paragraph in view of the foregoing amendment and the following remarks. The phrase "impeding activity" would be understandable to persons of ordinary skill in this art, to whom the specification is addressed, in view of page 3, lines 28-30, and the paragraph bridging pages 6 and 7, for example. See, especially, page 6, lines 4 to 33 where it is clearly explained that the isolated DNA is inserted into a microorganism which has no corresponding enzyme activity, for example only. Claim 1 has been amended to clarify the method step at d). Favorable reconsideration is solicited.

The examiner is requested to favorably reconsider the rejection of claims 8 and 9 under 35 U.S.C. 112, second paragraph in view of the foregoing amendment. Claims 8 and 9 have been canceled in favor of new claims 10 and 11. The applicants respectfully urge that the various selectivity terms are not indefinite, but rather indicate to persons of ordinary skill the nature of the enzymatic change which takes place in the altered substrates. In the case of chiral starting compounds, the alterations result in racemic or optically active products, i.e., stereo selectivity. Favorable

reconsideration is solicited.

Claims 1, 2 and 4-9 stand rejected under 35 U.S.C. 112, first paragraph as based on a disclosure which lacks enablement. This rejection is traversed. The description of the invention gives clear guidance to persons of ordinary skill in the art. The special plasmid p2792 is not necessary for the invention. Every other plasmid would also work in E. coli XL1 Red (see page 5, lines 11 to 21. The strain E. coli XL1 Red is available from Stratagene (see page 5, lines 31 to 36). The gist of the invention is to select new enzyme activities after mutation in E. coli XL1 Red according to the invention. This process is independent from the enzyme and the source of the enzyme which is mutated. To reduce the scope of the invention would deprive the applicants of full protection of the invention and invite competitors to exploit the invention with impunity. Favorable reconsideration is solicited.

Claims 1, 2 and 4-9 stand rejected under 35 U.S.C. 102(b) as being anticipated by Greener et al. This rejection is traversed. Greener et al. disclose a method for the mutation of a phosphatase gene in e. Coli and not, as in the instant case, a method for altering the substrate specificity. Step 1(c) of the instant process is not included in the Greener et al. process. And accordingly the Greener et al. disclosure is not anticipatory. Favorable reconsideration is solicited.

The rejection of claims 1-9 under 35 U.S.C. 103(a) as being unpatentable over Greener et al. In view of Wilks et al. is again traversed. Although Greener et al. do disclose the c) step of the instantly claimed process, and fail to disclose several other features as noted by the examiner, the examiner relies upon Wilks et al. who also fail to

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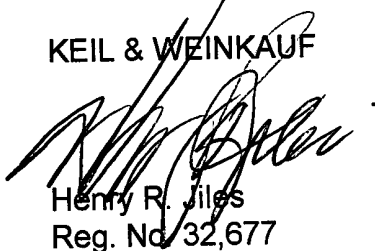
make up the deficiencies of the primary reference. A mere desire to produce enzymes with new substrate specificities, as postulated by the examiner, is not a suggestion of the very specific process for doing so which is claimed herein.

In view of the foregoing amendment and remarks, the applicants respectfully urge that the process claimed herein is patentable, and a Notice of Allowance is solicited.

To the extent necessary, applicant(s) petition for an Extension of Time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

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